## Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A benzopyran compound of formula (I)

$$R^4$$
  $(CH_2)_m$ -V- $(CH_2)_n$ - $R^5$   $W$   $H$   $R^3$   $R^2$   $R^1$ 

or a pharmaceutically acceptable salt thereof,

wherein

X is NR<sup>6</sup> wherein R<sup>6</sup> is hydrogen atom or C<sub>1-4</sub> alkyl group;

Y is a bond, SO or  $SO_2$ ;

Z is  $C_{1-4}$  alkyl group (wherein the  $C_{1-4}$  alkyl group may be arbitrarily substituted with 1 to 5 halogen atoms-or pheny group (wherein the phenyl group may be arbitrarily substituted with  $C_{1-4}$  alkyl group)) or phenyl group (wherein the phenyl group may be arbitrarily substituted with  $C_{1-4}$  alkyl group);

W is hydrogen atom, hydroxy group,  $C_{1-6}$  alkoxy group (wherein the  $C_{1-6}$  alkoxy group may be arbitrarily substituted with halogen atom), halogen atom,  $C_{1-4}$  alkyl group or  $C_{1-6}$  alkylsulfonylamino group;

 $R^1$  and  $R^2$  are independently of each other  $C_{1-3}$  alkyl group (wherein the  $C_{1-3}$  alkyl group may be arbitrarily substituted with hydroxy group, methoxy group, halogen atom or trifluoromethoxy group);

R<sup>3</sup> is hydrogen atom, hydroxy group or methoxy group;

m is an integer of 0 to 4;

n is an integer of 0 to 4;

V is a single bond, CR<sup>7</sup>R<sup>8</sup> wherein R<sup>7</sup> is

- C<sub>1-6</sub> alkyl group (wherein the C<sub>1-6</sub> alkyl group may be arbitrarily substituted with halogen atom, hydroxy group, C<sub>1-6</sub> alkoxy group (wherein the C<sub>1-6</sub> alkoxy group may be arbitrarily substituted with halogen atom), C<sub>6-14</sub> aryl group or C<sub>2-9</sub> heteroaryl group (wherein each of the C<sub>6-14</sub> aryl group or C<sub>2-9</sub> heteroaryl group may be arbitrarily substituted with 1 to 3 R<sup>10</sup> wherein R<sup>10</sup> is halogen atom; hydroxy group; C<sub>1-6</sub> alkyl group (wherein the C<sub>1-6</sub> alkyl group may be arbitrarily substituted with halogen atom, hydroxy group or C<sub>1-6</sub> alkoxy group (wherein the C<sub>1-6</sub> alkoxy group may be arbitrarily substituted with halogen atom)); C<sub>1-6</sub> alkoxy group (wherein the C<sub>1-6</sub> alkoxy group may be arbitrarily substituted with halogen atom)); nitro group; cyano group; formyl group; formamide group; sulfonylamino group; sulfonyl group; amino group; C<sub>1-6</sub> alkylamino group; di-C<sub>1-6</sub> alkylamino group; C<sub>1-6</sub> alkylamino group; di-C<sub>1-6</sub> alkylamino group; di-C<sub>1-6</sub> alkylaminocarbonyl group; C<sub>1-6</sub> alkylaminocarbonyl group; di-C<sub>1-6</sub> alkylaminocarbonyl group; C<sub>1-6</sub> alkylaminosulfonyl group; C<sub>1-6</sub> alkylsulfonyl group; carboxy group or C<sub>6-14</sub> arylcarbonyl group, and when a plurality of R<sup>10</sup> are present, they may be identical or different from each-other) other)),
- $C_{6-14}$  aryl group or  $C_{2-9}$  heteroaryl group (wherein each of the  $C_{6-14}$  aryl group or  $C_{2-9}$  heteroaryl group may be arbitrarily substituted with 1 to 3  $R^{10}$  wherein  $R^{10}$  has the above-mentioned-meaning)) meaning);
  - hydroxy group or
- $C_{1-6}$  alkoxy group (wherein the  $C_{1-6}$  alkoxy group may be arbitrarily substituted with halogen atom), and  $R^8$  is
- hydrogen atom,
- $C_{1-6}$  alkyl group (wherein the  $C_{1-6}$  alkyl group may be arbitrarily substituted with halogen atom, hydroxy group,  $C_{1-6}$  alkoxy group (wherein the  $C_{1-6}$  alkoxy group may be arbitrarily

substituted with halogen atom)),

- C<sub>6-14</sub> aryl group or C<sub>2-9</sub> heteroaryl group (wherein each of the C<sub>6-14</sub> aryl group or C<sub>2-9</sub> heteroaryl group may be arbitrarily substituted with 1 to 3 R<sup>11</sup> wherein R<sup>11</sup> is halogen atom; hydroxy group; C<sub>1-6</sub> alkyl group (wherein the C<sub>1-6</sub> alkyl group may be arbitrarily substituted with halogen atom, hydroxy group or C<sub>1-6</sub> alkoxy group (wherein the C<sub>1-6</sub> alkoxy group may be arbitrarily substituted with halogen atom)); C<sub>1-6</sub> alkoxy group (wherein the C<sub>1-6</sub> alkoxy group may be arbitrarily substituted with halogen atom); nitro group; cyano group; formyl group; formamide group; sulfonylamino group; sulfonyl group; amino group; C<sub>1-6</sub> alkylamino group; C<sub>1-6</sub> alkylamino group; C<sub>1-6</sub> alkylamino group; C<sub>1-6</sub> alkylamino group; C<sub>1-6</sub> alkylaminocarbonyl group; C<sub>1-6</sub> alkylaminocarbonyl group; C<sub>1-6</sub> alkylaminocarbonyl group; carboxy group or C<sub>6-14</sub> arylcarbonyl group, and when a plurality of R<sup>11</sup> are present, they may be identical or different from each other),
- hydroxy group or
- $C_{1-6}$  alkoxy group (wherein the  $C_{1-6}$  alkoxy group may be arbitrarily substituted with halogen atom), or  $R^7$  together with  $R^8$  may represent O or S, or V is  $NR^9$  wherein  $R^9$  is hydrogen or  $C_{1-6}$  alkyl group (wherein the  $C_{1-6}$  alkyl group may be arbitrarily substituted with halogen atom,  $C_{1-6}$  alkoxy group (wherein the  $C_{1-6}$  alkoxy group may be arbitrarily substituted with halogen atom), hydroxy group,  $C_{6-14}$  aryl group or  $C_{2-9}$  heteroaryl group (wherein each of the  $C_{6-14}$  aryl group or  $C_{2-9}$  heteroaryl group may be arbitrarily substituted with 1 to 3  $R^{11}$  wherein  $R^{11}$  has the above-mentioned meaning)); or O, S, SO or SO<sub>2</sub>;

 $R^4$  is hydrogen or  $C_{1-6}$  alkyl group (wherein the  $C_{1-6}$  alkyl group may be arbitrarily substituted with halogen atom,  $C_{1-6}$  alkoxy group (wherein the  $C_{1-6}$  alkoxy group may be arbitrarily substituted with halogen atom), or hydroxy group); and

R<sup>5</sup> is

- hydrogen atom,
- $C_{1-6}$  alkyl group (wherein the  $C_{1-6}$  alkyl group may be arbitrarily substituted with halogen atom,  $C_{1-6}$  alkoxy group (wherein the  $C_{1-6}$  alkoxy group may be arbitrarily substituted with halogen atom), amino group, carboxy group or hydroxy group),
- $C_{3-8}$  cycloalkyl group or  $C_{3-8}$  cycloalkenyl group (wherein the  $C_{3-8}$  cycloalkyl group or  $C_{3-8}$  cycloalkenyl group may be arbitrarily substituted with halogen atom,  $C_{1-6}$  alkyl group (wherein the  $C_{1-6}$  alkyl group may be arbitrarily substituted with halogen atom,  $C_{1-6}$  alkoxy group (wherein the  $C_{1-6}$  alkoxy group may be arbitrarily substituted with halogen atom), amino group, carboxy group or hydroxy group),  $C_{1-6}$  alkoxy group (wherein the  $C_{1-6}$  alkoxy group may be arbitrarily substituted with halogen atom), amino, carboxy group or hydroxy group), or
- C<sub>6-14</sub> aryl group or C<sub>2-9</sub> heteroaryl group (wherein each of the C<sub>6-14</sub> aryl group or C<sub>2-9</sub> heteroaryl group may be arbitrarily substituted with 1 to 3 R<sup>12</sup> wherein R<sup>12</sup> is halogen atom; hydroxy group; C<sub>1-6</sub> alkyl group (wherein the C<sub>1-6</sub> alkyl group may be arbitrarily substituted with halogen atom, hydroxy group or C<sub>1-6</sub> alkoxy group (wherein the C<sub>1-6</sub> alkoxy group may be arbitrarily substituted with halogen atom)); C<sub>1-6</sub> alkoxy group (wherein the C<sub>1-6</sub> alkoxy group may be arbitrarily substituted with halogen atom); nitro group; cyano group; formyl group; formamide group; sulfonylamino group; sulfonyl group; amino group; C<sub>1-6</sub> alkylamino group; di-C<sub>1-6</sub> alkylamino group; C<sub>1-6</sub> alkylamino group; C<sub>1-6</sub> alkylaminocarbonyl group; di-C<sub>1-6</sub> alkylaminocarbonyl group; C<sub>1-6</sub> alkylaminocarbonyl group; C<sub>1-6</sub> alkylaminosulfonyl group; C<sub>1-6</sub> alkylaminologroup; C<sub>1-6</sub> alkylaminologroup, C<sub>6-14</sub> aryloxy group

or  $C_{6-14}$  arylcarbonylamino group, when a plurality of  $R^{12}$  are present, they may be identical or different from each other).

- 2. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 1, wherein both R<sup>1</sup> and R<sup>2</sup> are methyl group, R<sup>3</sup> is hydroxy group, and V is a single bond.
- 3. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 1, wherein both  $R^1$  and  $R^2$  are methyl group,  $R^3$  is hydroxy group, and V is  $CR^7R^8$ .
- 4. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 1, wherein both  $R^1$  and  $R^2$  are methyl group,  $R^3$  is hydroxy group, and V is  $NR^9$ .
- 5. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 2, wherein  $R^5$  is  $C_{1-6}$  alkyl group,  $C_{3-8}$  cycloalkyl group or  $C_{6-14}$  aryl group.
- 6. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 3, wherein  $R^5$  is  $C_{1-6}$  alkyl group,  $C_{3-8}$  cycloalkyl group or  $C_{6-14}$  aryl group.
- 7. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 4, wherein  $R^5$  is  $C_{1-6}$  alkyl group,  $C_{3-8}$  cycloalkyl group or  $C_{6-14}$  aryl group.
- 8. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 5, wherein W is hydrogen atom, hydroxy group, methoxy group, chlorine atom, bromine atom, methyl group, ethyl group or methylsulfonylamino group.
  - 9. (Previously Presented) The benzopyran compound or a pharmaceutically

acceptable salt thereof according to claim 6, wherein W is hydrogen atom, hydroxy group,

methoxy group, chlorine atom, bromine atom, methyl group, ethyl group or methylsulfonylamino group.

- 10. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 8, wherein  $R^5$  is  $C_{1-6}$  alkyl group or  $C_{6-14}$  aryl group,  $R^6$  is hydrogen atom or methyl group, Y is  $SO_2$ , and Z is  $C_{1-4}$  alkyl group.
- 11. (Previously Presented) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 8, wherein  $R^5$  is  $C_{1-6}$  alkyl group or  $C_{6-14}$  aryl,  $R^6$  is hydrogen atom or methyl group, Y is a bond, and Z is  $C_{1-4}$  alkyl group.
- 12. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -3-hydroxy-6-methoxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-1-benzopyran-7-yl}- methanesulfonamide or a pharmaceutically acceptable salt thereof.
- 13. (Previously Presented) A benzopyran compound which is N-{(3R\*, 4S\*)-3,6-dihydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-1-benzopyran-7-yl} methanesulfonamide or a pharmaceutically acceptable salt thereof.
- 14. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -3-hydroxy-6-methoxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-1-benzopyran-7-yl}-N-methylmethanesulfonamide or a pharmaceutically acceptable salt thereof.
- 15. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -4-[(2-cyclohexylethyl)amino]-3-hydroxy-6-methoxy-2,2-dimethyl-3,4-dihydro-2H-1-benzopyran-7-yl} methanesulfonamide or a pharmaceutically acceptable salt thereof.
- 16. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -3-hydroxy-6-methoxy-2,2-dimethyl-4-(pentylamino)-3,4-dihydro-2H-1-benzopyran-7-yl $\}$  methanesulfonamide or a pharmaceutically acceptable salt thereof.

- 17. (Previously Presented) A benzopyran compound which N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2,8-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-1-benzopyran-7-yl} methanesulfonamide or a pharmaceutically acceptable salt thereof.
- 18. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl $\}$  methanesulfonamide or a pharmaceutically acceptable salt thereof.
- 19. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl $\}$  ethanesulfonamide or a pharmaceutically acceptable salt thereof.
- 20. (Previously Presented) A benzopyran compound which is 1,1,1-trifluoro-N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}- methanesulfonamide or a pharmaceutically acceptable salt thereof.
- 21. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl $\}$ -N-methylmethanesulfonamide or a pharmaceutically acceptable salt thereof.
- 22. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -6-bromo-3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}-methanesulfonamide or a pharmaceutically acceptable salt thereof.
- 23. (Previously Presented) A benzopyran compound which is  $(3R^*, 4S^*)$ -2,2-dimethyl-7-dimethylamino-4-[(2-phenylethyl)amino]-3-chromanol or a pharmaceutically acceptable salt thereof.
- 24. (Previously Presented) A benzopyran compound which is  $(3R^*, 4S^*)$ -2,2-dimethyl-7-methylamino-4-[(2-phenylethyl)amino]-3-chromanol or a pharmaceutically acceptable salt thereof.

- 25. (Previously Presented) A benzopyran compound which is  $(3R^*, 4S^*)$ -4- $\{[2-(4-fluorophenyl)ethyl]amino\}$ -2,2-dimethyl-7-dimethylamino-3-chromanol or a pharmaceutically acceptable salt thereof.
- 26. (Previously Presented) A benzopyran compound which is  $(3R^*, 4S^*)$ -6-methoxy-2,2-dimethyl-7-dimethylamino-4-[(2-phenylethyl)amino]-3-chromanol or a pharmaceutically acceptable salt thereof.
- 27. (Previously Presented) A benzopyran compound which is  $(3R^*, 4S^*)$ -6-methoxy-2,2-dimethyl-7-methylamino-4-[(2-phenylethyl)amino]-3-chromanol or a pharmaceutically acceptable salt thereof.
- 28. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl $\}$ -4-methylbenzenesulfonamide or a pharmaceutically acceptable salt thereof.
- 29. (Previously Presented) A benzopyran compound which is N- $\{(3R*, 4S*)$ -3-hydroxy-2,2-dimethyl-6-[(methylsulfonyl)amino]-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}-methanesulfonamide or a pharmaceutically acceptable salt thereof.
- 30. (Previously Presented) A benzopyran compound which is  $(3R^*, 4S^*)$ -2,2-dimethyl-7-methylethylamino-4-[(2-phenylethyl)amino]-3-chromanol or a pharmaceutically acceptable salt thereof.
- 31. (Previously Presented) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-chromen-7-yl}-N-isopropylmethanesulfonamide or a pharmaceutically acceptable salt thereof.
- 32. (Previously Presented) A pharmaceutical comprising the benzopyran compound of claim 1 or pharmaceutically acceptable salt thereof as an active ingredient, and

a pharmaceutically acceptable excipient.

- 33. (Previously Presented) A pharmaceutical for treating arrhythmia comprising the benzopyran compound of claim 1 or pharmaceutically acceptable salt thereof as an active ingredient, and a pharmaceutically acceptable excipient.
- 34. (Previously Presented) The benzopyran compound of claim 18, wherein the pharmaceutically acceptable salt is N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl $\}$  methanesulfonamide maleate.
- 35. (Previously Presented) The benzopyran compound of claim 19, wherein the pharmaceutically acceptable salt is N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl $\}$  ethanesulfonamide hydrochloride.
- 36. (Previously Presented) The benzopyran compound of claim 20, wherein the pharmaceutically acceptable salt is 1,1,1-trifluoro-N-{(3R\*, 4S\*)-3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}-methanesulfonamide maleate.
- 37. (Previously Presented) The benzopyran compound of claim 21, wherein the pharmaceutically acceptable salt is N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}-N-methylmethanesulfonamide hydrochloride.
- 38. (Previously Presented) The benzopyran compound of claim 23, wherein the pharmaceutically acceptable salt is  $(3R^*, 4S^*)$ -2,2-dimethyl-7-dimethylamino-4-[(2-phenylethyl)amino]-3-chromanol hydrochloride.
- 39. (Previously Presented) The benzopyran compound of claim 24, wherein the pharmaceutically acceptable salt is  $(3R^*, 4S^*)$ -2,2-dimethyl-7-methylamino-4-[(2-phenylethyl)amino]-3-chromanol hydrochloride.

- 40. (Previously Presented) The benzopyran compound of claim 25, wherein the pharmaceutically acceptable salt is  $(3R^*, 4S^*)$ -4-{[2-(4-fluorophenyl)ethyl]amino}-2,2-dimethyl-7-dimethylamino-3-chromanol hydrochloride.
- 41. (Previously Presented) The benzopyran compound of claim 27, wherein the pharmaceutically acceptable salt is  $(3R^*, 4S^*)$ -6-methoxy-2,2-dimethyl-7-methylamino-4-[(2-phenylethyl)amino]-3-chromanol hydrochloride.
- 42. (Previously Presented) The benzopyran compound of claim 30, wherein the pharmaceutically acceptable salt is  $(3R^*, 4S^*)$ -2,2-dimethyl-7-methylethylamino-4-[(2-phenylethyl)amino]-3-chromanol hydrochloride.
- 43. (Previously Presented) The benzopyran compound of claim 31, wherein the pharmaceutically acceptable salt is  $(N-\{(3R^*, 4S^*)-3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-chromen-7-yl\}-N-isopropylmethanesulfonamid hydrochloride.$